Amendments to the Claims:

This claim listing will replace all prior versions and listings of claims in the application:

Claim Listing:

1. (currently amended) An immunomer compound, comprising at least two oligonucleotides linked at their 3' ends, ~~or~~ internucleoside linkages, ~~or a~~ functionalized nucleobase or sugar to a non-nucleotidic linker, wherein at least one of the oligonucleotides is an oligonucleotide having an accessible 5' end and comprising an immunostimulatory dinucleotide having the structure RpG, wherein R has the structure shown in Figure 24 and G is selected from the group consisting of guanosine, 2'-deoxyguanosine, 2'-deoxy-7-deazaguanosine, 2'-deoxy-6-thioguanosine, arabinoguanosine, 2'-deoxy-2'-substituted-arabinoguanosine, 2'-O-substituted-arabinoguanosine, and other non-natural purine nucleosides.

2. (canceled)

3. (withdrawn) The immunomer according to claim 1 wherein at least one of the oligonucleotides has structure

5'-Nn-N1-Y-Z-N1-Nn-3' ***(III)***

wherein:

the base of Y is 2-oxo-7-deaza-8-methyl-purine;

the base of Z is guanine, 2-amino-6-oxo-7-deazapurine, 2-amino-6-thiopurine, 6-oxo-purine or other non-natural purine nucleoside,

N1 and Nn at each occurrence, is independently a naturally occurring or a synthetic nucleoside or an immunostimulatory moiety selected from the group consisting of abasic nucleosides, arabinonucleosides, 2'-deoxyuridine, α-deoxyribonucleosides, β–L-deoxyribonucleosides, and nucleosides linked by a phosphodiester or modified internucleoside linkage to the adjacent nucleoside on the 3' side, the modified internucleotide linkage being selected from a linker

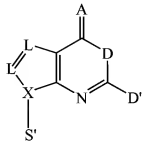
having a length of from about 2 angstroms to about 200 angstroms, C2-C18 alkyl linker, poly(ethylene glycol) linker, 2-aminobutyl-1,3-propanediol linker, glyceryl linker, 2'-5' internucleoside linkage, and phosphorothioate, phosphorodithioate, or methylphosphonate internucleoside linkage, wherein the recited oligonucleotide is directly or indirectly linked to another oligonucleotide, and wherein n is a number from 0-30.

4. (canceled)

5. (withdrawn) The immunomer according to claim 3 wherein the immunostimulatory moiety is selected from the group consisting of abasic nucleosides, arabinonucleosides, 2'-deoxyuridine, α-deoxyribonucleosides, β–L-deoxyribonucleosides, and nucleosides linked by a modified internucleoside linkage to the adjacent nucleoside on the 3' side, the modified internucleotide linkage being selected from the group consisting of C2-C18 alkyl linker, poly(ethylene glycol) linkage, 2-aminobutyl-1,3-propanediol linker, 2'-5' internucleoside linkage, methylphosphonate internucleoside linkage; methylphosphono-thioates, phosphotriesters, phosphothiotriesters, phosphorothioates, phosphorodithioates, triester prodrugs, sulfones, sulfonamides, sulfamates, formacetal, N-methylhydroxylamine, carbonate, carbamate, morpholino, boranophosphonate, phosphoramidates, especially primary amino-phosphoramidates, N3 phosphoramidates and N5 phosphoramidates, and stereospecific linkages, nucleosides having sugar modifications, 2'-substituted pentose sugars including, without limitation, 2'-O-methylribose, 2'-O-methoxyethylribose, 2'-O-propargylribose, and 2'-deoxy-2'-fluororibose; 3'-substituted pentose sugars, including, without limitation, 3'-O-methylribose; 1',2'-didcoxyribose; arabinose; substituted arabinose sugars, hexose sugars, and alpha-anomers, peptide nucleic acids (PNA), peptide nucleic acids with phosphate groups (PHONA), locked nucleic acids (LNA), morpholinonucleic acids, and oligonucleotides having backbone linker sections having a length of from about 2 angstroms to about 200 angstroms, alkyl linkers or amino linkers, DNA isoforms, β-L-deoxyribonucleosides, α–deoxyribonucleosides, nucleosides having unnatural internucleoside linkage positions, and nucleosides having modified heterocyclic bases.

6.-9. (canceled)

10. (withdrawn) The immunomer according to claim 1 wherein one purine nucleoside in the immunostimulatory dinucleotide has the structure (***II***):



(***II***)

wherein:

D is a hydrogen bond donor;

D' is selected from the group consisting of hydrogen, hydrogen bond donor, and hydrophilic group;

A is a hydrogen bond acceptor or a hydrophilic group;

X is carbon or nitrogen;

each L is independently an atom selected from the group consisting of C, O, N and S; and

S' is a pentose or hexose sugar ring, or a non-naturally occurring sugar.

11. (withdrawn) The immunomer according to claim 10 wherein the sugar ring is derivatized with a phosphate moiety, modified phosphate moiety, or other linker moiety suitable for linking the purine nucleoside to another nucleoside or nucleoside analog.

12. (withdrawn) The immunomer according to claim 10 wherein the hydrogen bond donors are selected from the group consisting of -NH-, $-NH_2$, -SH and -OH.

13. (withdrawn) The immunomer according to claim 10 wherein the hydrogen bond acceptors are selected from the group consisting of C=O, C=S, -N= and the ring nitrogen atoms of an aromatic heterocycle.

14. (withdrawn) The immunomer according to claim 10 wherein the non-naturally occurring purine is 2-amino-6-thiopurine, 6-oxopurine or 2-amino-6-oxo-7-deazapurine.

15. (withdrawn) The immunomer according to claim 1, wherein the non-nucleotidic linker is selected from the group consisting of a linker from about 2 angstroms to about 200 angstroms in length, a metal, a soluble or insoluble biodegradable polymer bead, an organic moiety having functional groups that permit attachment to the 3'-terminal nucleoside of the oligonucleotide, a biomolecule, a cyclic or acyclic small molecule, an aliphatic or aromatic hydrocarbon, either of which optionally can include, either in the linear chain connecting the oligonucleotides or appended to it, one or more functional groups selected from the group consisting of hydroxy, amino, thiol, thioether, ether, amide, thioamide, ester, urea, and thiourea; amino acids, carbohydrates, cyclodextrins, adamantane, cholesterol, haptens antibiotics, glycerol or a glycerol homolog of the formula $HO-(CH_2)_o-CH(OH)-(CH_2)_p-OH$, wherein o and p independently are integers from 1 to about 6, and a derivative of 1,3-diamino-2-hydroxypropane.

16. (withdrawn) The immunomer according to claim 1, wherein the internucleoside linkages consist essentially of phosphodiester linkages.

17. (canceled)

18 (withdrawn) The immunomer according to claim 1, wherein G is arabinoguanosine or 2'-deoxy-2'-substituted arabinguanosine, 2'-deoxy-7-deazaguanosine or 2'-deoxy-6-thioguanosine, or 2'-deoxyinosine.

19.-30. (canceled)

31. (previously presented) A composition comprising an immunomer according to claim 1 and a physiologically acceptable carrier.

32. (withdrawn) A method for generating an immune response in a vertebrate, the method comprising administering to the vertebrate an immunomer according to claim 1.

33.-39. (canceled)

40. (withdrawn) The method of claim 32 further comprising administering a vaccine.

41. (canceled)

42. (withdrawn) The method of claim 40 further comprising administering an adjuvant.

43.-94. (canceled)

95. (withdrawn) The immunomer according to Claim 1 wherein at least one of the oligonucleotides has the sequence of SEQ ID NO 177.

96.-98. (canceled)

99. (withdrawn) The immunomer according to Claim 1 wherein at least one of the oligonucleotides has the sequence of SEQ ID NO 181.

100.-146. (canceled)

147. (withdrawn) The method of claim 32 further comprising administering an adjuvant.

148. (new) The immunomer according to claim 1, wherein the internucleoside linkages comprise phosphorothiate linkages.

149 (new) The immunomer according to claim 1, wherein the internucleoside linkages consist essentially of phosphorothioate linkages.